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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,206	09/10/2003	Donald E. Schneider	9709A	5584
112	7590	06/27/2005	EXAMINER	
ARMSTRONG WORLD INDUSTRIES, INC. LEGAL DEPARTMENT P. O. BOX 3001 LANCASTER, PA 17604-3001			CHEVALIER, ALICIA ANN	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,206

Applicant(s)

SCHNEIDER ET AL.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/05/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 34-62 are pending in the application, claims 1-33 have been cancelled.
2. Amendments to claims, filed on September 10, 2003, have been entered in the above-identified application.

Specification

3. The abstract of the disclosure is objected to because it is more than 150 words.
Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-46 and 48-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fry et al. (U.S. Patent No. 4,614,680) in view of Arendt et al. (U.S. Patent No. 5,990,214).

Fry discloses a textured surface covering (*decorative product, title*) comprising a textured substrate (*base layer, col. 3, line 5 and figures 3 and 4*) and a layer (*wear layer, col. 2, line 47*) overlying the textured substrate (*figures 3 and 4*). The textured substrate has a textures surface (*figures 3 and 4*). The layer comprises a melt processable composition comprising a melt processable polymer resin (*polyvinyl chloride, col. 2, line 52 and col. 4, line 46 through col. 6,*

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line 19) and the layer is deemed to have a first surface adjacent the textured surface and a second surface spaced from the textured surface (*figures 3 and 4*). The layer conforms to the textured surface, whereby the first and second surfaces substantially follow the contours of the textured surface (*figures 3 and 4*). From figures 3 and 5 the layer can be seen to be substantially uniform in thickness, i.e. thickness that varies less than about 20%. The average thickness of the layer is between 18-22 mils (*col. 2, line 55*).

Fry discloses that the configuration of the base layer can be varied as desired to provide different constructions of the decorative product of the invention (*col. 4, lines 21-24*).

Furthermore, the configuration can provide differential height, differential texture and differential gloss features as desired to impart an overall pleasing aesthetic quality which is eminently desirable in floor covering products (*col. 2, line 66 through col. 3, line 2*).

Therefore, the exact texture height to vertical distance of the surface texture is deemed to be a result effective variable with regard to the desired aesthetic effect. It would require routine experimentation to determine the optimum value of a result effective variable, such as texture height to vertical distance, in the absence of a showing of criticality in the claimed texture height to vertical distance. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art would have been motivated by optimize the texture height to vertical distance in order to create different aesthetic effect, such as differential texture and gloss levels.

Fry fails to disclose that the melt processable polymer resin contains a melt processing aid.

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Arendt discloses a polyvinyl chloride resin for a wear layer in flooring applications (*col. 5, lines 23-32*). The resin also includes a plasticizing additive, i.e. melt processing aid, such as oils and lubricants (*col. 3, lines 11-16*). The plasticizer provide stain resistance and processibility (*col. 5, lines 30-32*).

Arendt also discloses that the plasticizer increases the viscosity of the resin (*col. 8, lines 49-58*). Therefore, the exact viscosity of the melt processable composition is deemed to be a result effective variable with regard to the melt processing aid. It would require routine experimentation to determine the optimum value of a result effective variable, such as viscosity, in the absence of a showing of criticality in the claimed viscosity. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art would have been motivated to optimize the viscosity of the melt processable composition depending on what type of aids were needed.

Fry and Arendt are analogous because they both disclose wear resistant flooring.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Arendt's melt processable polymer resin with melt processing aid as the wear layer in Fry in order to provide stain resistance and processibility (*Arendt col. 5, lines 30-32*).

6. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fry in view of Arendt as applied above, and further in view of Smith (US Patent No. 4,312,686).

Fry and Arendt are relied upon as described above.

Fry and Arendt fail to disclose that there are no visible bubbles entrapped between the first surface of the layer and the adjacent pre-textured surface.

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Smith discloses a floor covering composite comprising a base web, a print layer, and a vinyl wear coat (*figure 7*). Smith teaches manufacturing the floor covering in such a way as to form a smooth uniform film and to prevent bubbles or wrinkles in the composite (*col. 3, lines 67-68*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to set up the equipment of Fry and Arendt to prevent air bubbles from forming and becoming entrapped in view of the teaching of Smith because air bubbles are undesirable since they cause the wear layer to separate from the substrate.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Chevalier

6/23/05